	Enterprise Architecture Board Charter	S3401 Revision: B Effective Date: September 14, 2010
Independent Verification & Validation Program		

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APPROVAL SIGNATURES		DATE
Gregory Blaney (original signature on file)	IMS Representative	09/14/2010

REVISION HISTORY			
Revision	Description of Change	Author	Effective Date
Basic	Initial Release	Roger Harris	11/21/2006
A	Changed "IV&V Facility" to "IV&V Program"	Stephanie Ferguson	01/06/2009
B	Expanded to include detailed roles and vocabulary	Rick Cavanaugh	09/14/2010

REFERENCE DOCUMENTS	
Document Number	Document Title
IVV QM	NASA IV&V Quality Manual
IVV 10	Software and Hardware Configuration Management
IVV 11	IT Business Management
NPR 7120.5	NASA Space Flight Program and Project Management Requirements

If any process in this document conflicts with any document in NODIS, this document shall be superseded by the NODIS document. Any reference document external to NODIS shall be monitored by the Process Owner for current versioning.

WVU/NASA IV&V Enterprise Architecture Board (EAB) Charter

Charter Approval

Approved:_____ **Date:**_____

1.0   Purpose

The purpose of this charter is to establish the NASA IV&V Enterprise Architecture Board (EAB) and to assign EAB responsibilities for the West Virginia University (WVU)/NASA IV&V Facility and NASA IV&V Program. These responsibilities include approving changes to the NASA IV&V business and strategic model, which affects Information Technology (IT) and associated services, as is outlined in IVV 11, *IT Business Management*.

The EAB responsibilities are to manage architecture that governs the EA "As-Is." The EA "As-Is" defines the applications, services, and access that determine the overall IT systems for the NASA IV&V Program.

2.0   Scope

This charter defines the authority, responsibilities, and composition of the EAB that govern the EA "As-Is." The EA "As-Is" comprises systems, subsystems, and components that are directly managed or funded by the NASA IV&V Program or WVU in support of the NASA IV&V Program and its related contractors and tenants. This includes all NASA IV&V facilities, systems, and subsystems.

3.0   Goals

The goals of the EAB are to:

- Plan, design, and implement an efficient, effective, and comprehensive EA for the NASA IV&V Program
- Provide systematic enterprise management of NASA IV&V IT systems
- Establish a consolidated Enterprise Content Management (ECM) system that includes all knowledge and IT functions as they relate to business
- Establish an architecture baseline ("As-Is" documentation), gather business drivers, and develop and maintain a target architecture and implementation plan ("To Be" documentation)

The goals of the charter are to:

- Foster broad representation of the NASA IV&V community represented by the appointed business stakeholders and associated system components. The EAB allows groups to bring new ideas and concerns to minimize disruptions to IV&V business and research efforts, as well as their own organizations.
- Reduce or eliminate stovepipe systems within the NASA IV&V infrastructure

4.0   Authority

The authority to create this EAB is derived from the Enterprise Architect with Senior Leadership.

4.1   Delegation of Authority

The Enterprise Architect has the authority for enacting changes to the EA "As-Is." The Enterprise Architect serves as the EA Official.

4.2   Scope of Authority

The authority of the EAB shall extend to policies that affect the decisions relating to business solutions intended to operate in conjunction with the EA "As-Is."

5.0   Responsibilities

The EAB is responsible for:

- Working with stakeholders from all programs/project groups to ensure that business requirements, issues, and concerns for NASA IV&V and local organizations are considered
- Reviewing and documenting proposed changes and their impacts
- Establishing plans to implement approved changes
- Providing direction to the IT Implementation Team for final performance

6.0   Membership

EAB meetings shall be attended by the following members or their designated alternates:

- NASA IV&V Director
- EAB Chair (IT Manager)
- EA Official (Enterprise Architect)
- Program Support Office Lead
- IT Lead for affected systems (NASA and/or tenants)
- Management Representative for affected systems
- Implementation Team Lead
- Goddard Space Flight Center (GSFC) EA Official

EAB members may designate alternates to represent them. Additionally, all members may invite technical advisors and other individuals that may be impacted by changes under review at EAB meetings.

7.0   Roles & Responsibilities

All members are expected to consider the business continuity of the NASA IV&V IT environment and user community. Each member may submit proposed changes to the EAB, in writing, via e-mail (eab@ivv.nasa.gov). A full procedure is outlined in IVV 11, *IT Business Management*.

In addition, the following responsibilities are assigned:

7.1   NASA IV&V Director

The NASA IV&V Director shall:

- Provide any final approval brought forward on any action

7.2   EAB Chair

The EAB Chair shall:

- Provide final approval to changes to the EA "As-Is" (to become "To Be") based upon EAB recommendation

7.3   EA Official

The EA Official shall:

- Provide final recommendation to the EAB Chair
- Call meetings of the EAB
- Prepare and publish the agenda for EAB meetings
- Ensure that EAB proceedings are documented, including justification for changes, impacts of the changes, causes, options, cost, and implementation planning
- Prepare and distribute minutes from EAB meetings and maintain documentation of EAB actions
- Approve EAB procedures
- Recruit EAB membership (stakeholders) to represent the NASA IV&V community
- Provide input and recommendation to changes to overall architecture and business methodology
- Input to oversight and compliance with EA approach in new best-of-breed applications/tools be put forth by the NASA IV&V Program
- Represent NASA IV&V Management for all IT purchases once they are approved by NASA IV&V Management
- Direct Tools Lab, Network Operations, and any other NASA IV&V IT-centric groups in their overall methodology and architecture

7.4   Program Support Office Lead

The Program Support Office Lead shall:

- Ensure that the interests and business functions of the Program Support Office are brought forward and documented
- Attend EAB meetings that affect the Program Support Office
- Report EAB findings to their management

7.5   IT Lead

The IT Lead shall:

- Represent the NASA IV&V Program with regard to IT infrastructure
- Ensure that network/systems engineering is applied, when applicable, to accommodate approved changes

7.6   Management Representative for affected system

The Management Representative for an affected system shall:

- Ensure that the interests and business functions of his/her organization are brought forward and documented
- Report EAB findings to his/her program/project lead

7.7   Implementation Team Lead

The Implementation Team Lead shall:

- Ensure that the interests and technical functions of his/her organization are brought forward and documented, identifying the cost and risks associated with the requested impact/change

7.8   GSFC EA Official

The GSFC EA Official shall:

- Provide input and recommendation to changes to overall architecture and business methodology
- Identify NASA/GSFC IT requirements levied on NASA IV&V to ensure that directives are being planned and accomplished

8.0 Commonly Used Terms

The following definitions are terms that are not necessarily used in this charter, but that are commonly used in EAB proceedings.

8.1 Application Architecture

The Application Architecture describes how NASA information systems should be designed and how they cooperate with each other, and factors to consider in their deployment. It also serves as the focal point for an application systems inventory for NASA.

8.2 Architecture

Architecture is the structure of components, their interrelationships, and the principles and guidelines governing their design and evolution over time.

8.3 Baseline Architecture

The Baseline Architecture is the set of products that portray the existing enterprise, the current business practices, and technical infrastructure. The Baseline Architecture may also be referred to as the "As-Is" Architecture or the Current Architecture.

8.4 Business Architecture

The Business Architecture defines what, where, and by whom the work of the Agency is performed. As the knowledge base for the EA, the Business Architecture provides a business-driven approach for determining the proper information, applications, and IT required by the enterprise.

8.5 Business Reference Model (BRM)

The BRM provides a hierarchical structure for the business operations of the Federal Government. The BRM identifies four business areas that provide a high-level view of the operations the Government performs: Services for Citizens, Mode of Delivery, Support Delivery of Services, and Management of Government Resources.

8.6 Data Architecture

The Data Architecture provides an understanding of what information is needed to effectively execute the enterprise's business processes, and provides a framework for effectively managing the enterprise's information environment. The Data Architecture links information behavior (i.e., accessing, using, and sharing data), information management processes, and information support staff to other aspects of the enterprise.

8.7   Data Reference Model (DRM)

The DRM describes the data and information that support programs and lines of business operations, and aids in describing the types of interaction and exchanges that occur between the Agency and its various customers, constituencies, and business partners. The DRM categorizes information into content areas, establishes a commonly understood classification for Federal data, and streamlines processes associated with information exchange both within the Agency and between the Government and its external stakeholders. The DRM helps to identify duplicative data resources.

8.8   Enterprise Architecture (EA)

The EA is an explicit description and documentation of the current and desired relationships among business and management processes and information technology. The EA includes principles, an architecture framework, a technical standards profile, current and target architectures, and a transition strategy to move from the current to target architecture (from NPR 7120.5, *NASA Space Flight Program and Project Management Requirements*).

8.9   Enterprise Architecture (EA) Products

EA Products are the graphics, models, and/or narrative that depict the EA environment and design.

8.10   Reference Architecture

The Reference Architecture is a graphically represented, high-level system overview that is intentionally free of implementation details. It generally includes high-level descriptions of the system components, a definition of relationships between components, definitions of relationships between system components and elements external to the system, and identification of performance drivers and capacity requirements. Where applicable, a Reference Architecture also provides high-level definitions of key data sources, data stores produced, and interfaces between the system components.

8.11   Sequencing Plan

A sequencing plan is a document that defines the strategy for changing the enterprise from the current baseline to the target architecture. It schedules multiple, concurrent, interdependent activities, and incremental builds that will evolve the enterprise.

8.12   Service Reference Model (SRM)

The SRM is a business and performance-driven, functional framework that classifies service components with respect to how they support business and/or performance

objectives. The SRM is intended to support the discovery of Agency-wide business and application service components in IT investments and assets. The SRM is structured across horizontal and vertical service domains that, independent of the business functions, can provide a foundation to support the reuse of applications, application capabilities, components, and business services.

8.13 Technology Architecture

The Technology Architecture is the bottom layer in the architectural hierarchy and is considered the foundation upon which all the other IT architectures are built. The architecture or design of the technology is driven by business needs communicated by the design of the three higher architectural layers: Business Architecture, Data Architecture, and Application Architecture.

8.14 Technical Reference Model (TRM)

The TRM identifies and describes the technical services used throughout the Agency. The TRM is a high-level view of the NASA service areas and how they are related to the general technology layers. It describes the inter-relationship between the services and the user environment, applications, integration, data, and common infrastructure. The TRM is also used for communicating technology component elements such as policies, standards, and product recommendations.

8.15 System Development Life Cycle (SDLC)

The SDLC is the scope of activities associated with a system, encompassing the system's initiation, development and acquisition, implementation, operation and maintenance, and ultimately its disposal that instigates another system initiation.